

BACKGROUND PAPER

SEPTEMBER 8, 2018 ANACONDA SMELTER SUPERFUND SITE VISIT

DATE PREPARED: 8/15/18

Objective: Visit the Anaconda Smelter Superfund Site to provide Administrator Wheeler a site tour and overview of the recently reached conceptual settlement framework that addresses final cleanup actions and significant benefits to the local community. The site is on the Superfund Administrator's Emphasis List and the upcoming milestone is to complete negotiations for implementation of remaining actions to address human health exposure.

Location: Anaconda, Montana

Site Background:

In 1977, Atlantic Richfield purchased the Anaconda Copper Mining Company, including the smelter. Operations at the Anaconda Smelter ceased in 1980 and the smelter facilities were dismantled soon thereafter. Because of ore processing operations, wastes, soil, groundwater and surface water are contaminated with arsenic, copper, cadmium lead and zinc, which are hazardous substances under the Superfund law. The Anaconda Smelter Superfund Site was placed on the National Priorities List of Superfund Sites in 1983 to address contamination from former smelting operations. The 300-square-mile Anaconda Smelter Site is located at the southern end of the Deer Lodge Valley in Montana. EPA is the lead agency with Atlantic Richfield Co. (AR) conducting site activities through administrative orders.

There are 5 OUs with final decisions at the site:

- **OU 15 – Mill Creek**, a former suburban community located adjacent and downwind of the smelter an impacted by high arsenic levels in soils and dust.
- **OU 11 – Flue Dust**, a by-product of copper smelting containing very high levels of metal and arsenic, stockpiled at nine locations in the East Anaconda Yards and on Smelter Hill.
- **OU 7 – Old Works/East Anaconda Development Area (OW/EADA)** consists of historic milling and smelting areas located immediately east of Anaconda, including former smelter properties conveyed from Atlantic Richfield to Anaconda-Deer Lodge County for redevelopment.
- **OU 16 – Community Soils (CSOU)** includes soils within residential and commercial properties, including Anaconda, Opportunity, and adjacent rural areas within the site.
- **OU 4 – Anaconda Regional Water, Waste & Soils (ARWWS)** consists of all remaining waste areas, including the Anaconda Ponds, Opportunity Ponds, Slag and Smelter Hill as well as the adjacent 300 square miles of soil, surface and ground water impacted by smelter emissions.

We plan to begin delisting OU 15 – Mill Creek and OU 11 – Flue Dust very early next year. The remainder of the site will be delisted beginning in 2025.

There is currently an active lawsuit against Atlantic Richfield brought on by homeowners in the Opportunity area seeking restoration damages under Montana law. The Montana Supreme Court found that CERCLA did not bar application of Montana's state restoration law. The case is scheduled to go to trial later this year. Impact of performing restoration work on a CERCLA site could make homeowners financially responsible for any damage to the existing remedy.

Earlier this year, homeowners in the Lost Creek area requested testing of their domestic well. Tests showed that their drinking water had elevated arsenic near 700 ppb. Given the location and depth of well, we believe that this contamination is naturally occurring. Regardless, the homeowners were

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immediately placed on bottled water and arrangements were made for them to consult with ATSDR. Since a reverse osmosis treatment system, as provided by remedy, would not reduce arsenic levels below drinking water standards, Atlantic Richfield provided funding for a new well. The new shallow well provides water that meets drinking water standards.

Cleanup Status:

Remedial actions have been completed on over 80% of the site. Remaining work will be completed on the following OUs by 2025 under the currently negotiated Consent Decree.

- **OU 7 – Old Works/East Anaconda Development Area.** Cleanup is mostly complete on this OU, including the construction of a Jack Nicklaus designed golf course. While the cleanup provided for nearly 20 new businesses, remaining efforts will focus on redeveloping properties adjacent to golf course.
- **OU 16 – Community Soils.** To date, over 1000 residential and commercial properties have been cleaned up. Under the Consent Decree an additional 1500 properties will be tested and cleanup where necessary. Institutional controls will also provide for interior and attic dust remediation.
- **OU 4 – Anaconda Regional Water, Waste and Soils.** Cleanup of the major waste source areas is mostly complete. This includes the Opportunity Ponds, where over 3500 acres of tailing have been capped and nearly 700 acres of new wetlands created; Smelter Hill and the Anaconda Ponds where another 1000 acres of the former facility have been capped. Remaining efforts will focus on the slag piles to prevent off-site migration while allowing the slag to be reused for industrial purposes.
Over 12,000 acres of mostly valley soil have been treated and reclaimed to date for the benefit of agriculture and wildlife. Remaining work will focus on the steeper upland areas to minimize contaminant loading to surface water. Although surface water quality will be improved, it is likely that certain State standards will need to be waived. Additionally, ground water standards have already been waived within the site. A domestic well program currently tests and, if necessary, provides homeowners with RO treatment units or new wells.

Community Concerns/EPA Actions

- Since the Opportunity lawsuit, the community has expressed concerns about the protectiveness of the cleanup, especially in parks and schools. Although the current residential cleanup began in 2015, In 2017, EPA directed Atlantic Richfield to prioritize testing and cleanup of the community's parks and schools. Additionally, in 2018, EPA sampled the interior of schools and provided cleanup where necessary.
- In May 2018, the Agency for Toxic Substances and Disease Registry (ATSDR) along with local and state partners conducted a community listening session to understand the community's health concerns. In July 2018, ATSDR returned to the community to provide their findings and announce that an exposure investigation will be conducted. The study will evaluate blood lead and urine arsenic and it will be completed in 2019.

Enforcement Update

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Recently we reached a site wide conceptual agreement to complete cleanup at the site. We had informed the other parties that we would reach an agreement by July 31, 2018 or we would issue UAO's to ensure cleanup would be complete by 2025. The agreement forms the framework for a final consent decree in the next few months that will allow us to meet our 2025 cleanup goal and provide significant economic development opportunities.